


Clinical Molecular Diagnostics

Test Menu



Brigham and Women's Hospital

Founding Member, Mass General Brigham

Clinical Molecular Diagnostics

Test Menu

	Indication	Solid Tumor, General	Glioblastoma or High Grade Glioma	Hematologic Malignancy	Microbiology/Virology	Specimen Criteria ¹	Whole Blood ²	Bone Marrow ³	Plasma ⁴	Fresh Frozen Tissue ⁵	Formalin-fixed Paraffin-embedded Tissue ⁶	Aspirate Smears	ThinPrep Fine Needle Aspirate	Cerebrospinal Fluid ⁷	Vitreous Fluid ⁷	Pleural Fluid ⁷	Ascites ⁷	Cervical Specimens ⁸	Cell Pellets ⁹	DNA ^{9,10}	RNA ^{9,10}	Methodology	PCR and Capillary Electrophoresis	Bisulfite PCR and Capillary Electrophoresis	Allele Specific PCR and Capillary Electrophoresis	Ultrasensitive PCR and Capillary Electrophoresis	Ultrasensitive Droplet Digital PCR	PCR and Hybridization using Cobas® HPV Test	qPCR	Qualitative RT-PCR and Gel Electrophoresis	Sanger Sequencing	447 Gene Custom Capture	88 Gene Custom Capture	Tumor Germline Capture NGS	Scheduling	Testing Frequency per Week	Turnaround Time ¹²
Microsatellite Instability ¹³	•				•	•				•									•			•											•		1x	5-14	
MGMT Promoter Methylation ¹³		•							•	•									•				•												2x	3-14	
MLH1 Promoter Methylation ¹³		•							•	•									•				•												1x	4-21	
EGFR Exon 19 T790M, L858R Mutations ^{14,15}	•				•			•	•	•									•						•										2x	3-14	
BRAF V600E & V600K Mutations ¹⁴	•				•	•			•	•	•		•						•																1x	3-14	
OncoPanel ¹³	•				•	•			•	•			•						•												•			3x	14-35		
IGH Rearrangement, B-cell Clonality ¹³			•		•	•			•	•			•	•				•				•													2x	3-14	
TCRG Rearrangement, T-cell Clonality ¹³			•		•	•			•	•			•	•				•				•													2x	3-14	
Quantitative BCR::ABL p210			•		•	•														•															3x	3-9	
Quantitative BCR::ABL p190			•		•	•														•															1x	3-10	
ABL1 Inhibitor Resistance Mutations			•		•	•														•											•				1x	4-28	
PML::RARA Fusion Transcript		•			•	•							•						•																1x	3-14	
JAK2 V617F Mutation ¹³		•			•	•		•	•				•						•					•											1x	3-14	
KIT D816V Mutation		•			•	•													•							•									1x	7-14	
MYD88 L265P Mutation ¹³		•			•	•		•	•				•	•	•	•			•						•										1x	3-14	
Rapid Heme Panel		•			•	•							•	•	•			•	•													•			7x	4-21	
HPV, Screening for High Risk of Cervical Dysplasia				•													•									•										5x	3-14
HPV, Full Genotyping				•						•									•								•									1x	4-30
Bacterial Identification from 16s Sequencing ¹⁶				•						•									•											•						1x	7-14
Fungal Identification from 18S Sequencing ¹⁶				•															•											•						1x	7-14

Footnotes

- Specimens are subject to rejection and results are not guaranteed for those submitted outside of posted criteria. Contact the laboratory with questions regarding specimen requirements.
- 10mL collected in an EDTA (lavender) tube.
- 1mL collected in an EDTA (lavender) tube.
- 3mL prepared from whole blood collected in an EDTA tube. Plasma can be received fresh within 12 hours of preparation or received frozen if frozen at ≤ -20°C within 24 hours of preparation.
- 0.2cm³ section of tissue.
- Formalin-fixed and paraffin-embedded tissue using 10% neutral buffered formalin. Tissues without decalcification preferred; tissues treated with EDTA-based solutions may be acceptable. Ten 5-micron or five 10-micron unstained slides and one marked H&E slide or three 50-micron sections (scrolls) in a 1.5mL tube. 0.25cm² of tissue per slide/section.
- 2mL
- 3mL collected in PreservCyt® in a ThinPrep® Pap vial.
- Inform the laboratory of the specimen storage solution used prior to sending.
- Contact the laboratory for quantity, concentration, volume, and elution solution requirements if sending DNA and RNA samples. Inform the laboratory of the specimen storage solution used prior to sending.
- Cancerous and noncancerous specimens must be submitted if requesting tumor and germline paired analysis.
- Total days from receipt of all specimens required for testing to result reporting.
- ≥20% tumor content (solid tissue)
- ≥1% tumor content (solid tissue)
- Whole blood: 10mL collected in an EDTA (lavender) tube, received within 2 hours of blood draw
Plasma: 3mL prepared from whole blood collected in EDTA tube within 3 hours of blood draw. Plasma can be received fresh within 12 hours of preparation or received frozen if frozen at ≤ -20°C within 24 hours of preparation.
- DNA prepared by BWH Microbiology.